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OFFICE OF THE CHIEF OF NAVAL OPERATIONS
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IN REPLY REFER TO
OPNAVINST 5311.7
OP-111C
12 AUG 1985

OPNAV INSTRUCTION 5311.7

From: Chief of Naval Operations

Subj: DETERMINING MANPOWER, PERSONNEL AND TRAINING (MPT)
REQUIREMENTS FOR NAVY ACQUISITIONS

Ref: (a) SECNAVINST 5000.1B (NOTAL)
(b) DODD 5000.39 of 17 Nov 83 (NOTAL)
(c) OPNAVINST 5000.49 (NOTAL)

Encl: (1) HARDMAN Analytical Tools and Techniques
(2) Functions and Membership of the MPT Advisory Board
(3) Policy Governing the Identification of MPT
Requirements for Navy Acquisitions

1. Purpose

a. To implement the Military Manpower/Hardware Integration (HARDMAN) program.

b. To establish policy and assign responsibility for determining Manpower, Personnel and Training (MPT) requirements for all system acquisitions, including modifications, from identification of mission need through development, production and deployment as specified in reference (a).

2. Background. MPT cost to support Navy acquisitions absorb more than one-third of the total life cycle cost of an acquisition. As a result, the HARDMAN program was established to integrate Navy MPT planning into the Weapon Systems Acquisition Process (WSAP) by developing a methodology to determine MPT requirements for those acquisitions beginning as early as program initiation. MPT requirements for new systems must be identified during concept exploration and design so that MPT supportability and affordability can be considered. The HARDMAN methodology provides the MPT requirements determination capability and is implemented by this instruction.

3. Scope. This instruction is applicable for all new program starts beginning in FY-86 and covers Navy acquisitions in Acquisition Category (ACAT) I through IV that may have manpower and/or training requirements.

4. Discussion. The HARDMAN program is a multi-faceted approach for determining WSAP MPT requirements. The analytical tools and techniques for conducting the MPT analysis are listed in enclosure (1). An informal MPT Advisory Board will be created to assist in the review and evaluation of MPT requirements for

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each new acquisition. Functions and membership of the MPT Advisory Board are discussed in enclosure (2).

5. Policy. Manpower and training requirements to support new acquisitions will be determined using the HARDMAN methodology beginning at program initiation and continuing through production and deployment. Additional policy is set forth in enclosure (3).

6. Responsibilities

a. Deputy Chief of Naval Operations (Manpower, Personnel and Training) (DCNO(MPT)) (OP-01)

(1) Issue policies and procedures for conducting early manpower and training planning in the WSAP and revise the policies and procedures as necessary.

(2) Establish, update and interpret HARDMAN program policies and procedures.

(3) Provide technical guidance and procedural support in the use of the HARDMAN methodology by program managers.

(4) Maintain the HARDMAN Information System (HIS) to aggregate and monitor emerging acquisition-driven manpower and training requirements, ensuring that appropriate security controls are enforced.

(5) Conduct MPT supportability assessment of all Navy acquisitions and provide final resolution, in concert with resource sponsors, for all MPT issues.

(6) Serve as a member of all MPT Advisory Board.

(7) Develop and conduct training for all users of the HARDMAN methodology.

(8) Conduct a baseline assessment on new systems to ensure that MPT resources are addressed adequately and in a timely manner.

b. Program Sponsors

(1) Identify manpower and training requirements in program planning and initiation documents.

(2) Serve as a member of the MPT Advisory Board.

(3) Ensure that MPT requirements for new systems are

updated as designs and schedules change.

(4) Ensure MPT requirements are identified for all new acquisitions.

(5) Provide funding for the early identification of MPT requirements.

c. Resource Sponsors

(1) Require the early and accurate identification of MPT requirements for all acquisitions.

(2) Program manpower and training resources for the requirements identified for the acquisition by the HARDMAN MPT analysis.

(3) Co-chair the MPT Advisory Board.

(4) Revise resource sponsor directives and instructions pertaining to manpower and training requirements determination and policy to incorporate the provisions of this instruction.

d. Commanders of Naval Systems Commands

(1) Implement the HARDMAN program in the Naval Systems Commands.

(2) Require that Program Managers use the HARDMAN methodology to identify MPT requirements for Navy acquisitions beginning at program initiation.

(3) Provide guidance and assistance as required to subordinate commands on their participation in the HARDMAN program application.

(4) Ensure that the Program Manager's charter includes direction for the use of HARDMAN to address MPT requirements.

(5) Serve as a member of the MPT Advisory Board.

(6) Ensure that Systems Command (SYSCOM) instructions on Integrated Logistic Support (ILS), Logistic Support Analysis (LSA) and MPT planning in the WSAP are revised to incorporate the provisions of this instruction.

(7) Provide the DCNO(MPT) a quarterly list of all active and planned acquisitions.

(8) Ensure that each Program Manager staff is adequate

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to conduct an early and accurate HARDMAN MPT analysis.

(9) Monitor the status of MPT analysis of each new acquisition and ensure the preparation and forwarding of the HARDMAN generated MPT documents described in enclosure (3).

e. Chief of Naval Education and Training (CNET) or appropriate Training Agent (TA)

(1) Participate in the WSAP by identifying those MPT requirements that are the responsibility of the TA as assigned by NAVCOMPT Manual Volume 7.

(2) Co-chair the MPT Advisory Board.

(3) Review HARDMAN-generated MPT Concept Documents and Resource Requirements Documents for completeness of training and training support planning.

(4) Track and ensure action on all training items addressed by the MPT Advisory Board.

(5) Revise CNET and TA instructions to incorporate the provisions of this instruction.

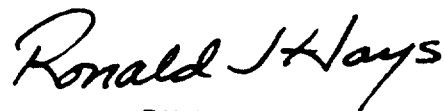
f. Fleet Commanders in Chief (FLTCINCs)

(1) Provide MPT related inputs to acquisition Program Management Offices (PMO) as requested.

(2) Serve as a member of the MPT Advisory Board.

(3) Provide guidance to subordinate commands concerning their participation in assisting the PMO by providing MPT data for HARDMAN analysis.

(4) Review HARDMAN-generated manpower and training requirements to assess adequacy of planned MPT requirements for new acquisitions.



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HARDMAN Analytical Tools and Techniques

1. The HARDMAN methodology is a set of analytical tools and techniques to be used by Acquisition Program Management Offices (PMO) to determine MPT requirements for Navy acquisitions. MPT data generated by application of the methodology are essential to the PMO and MPT planners in their planning and programming of the MPT resources to support introduction of new systems. The HARDMAN analysis begins at program initiation and continues through fleet introduction. Data from the analysis will be sufficient to address MPT requirements in the Justification for Major System New Start (JMSNS), Integrated Logistics Support Plan (ILSP), Navy Training Plan (NTP) and other WSAP-related documents.

2. A description of the HARDMAN methodology and procedures for conducting MPT analysis associated with the Weapon System Acquisition Process (WSAP) is contained in the following series of five HARDMAN Publications:

a. Navy Program Manager's HARDMAN Guide to Early MPT Planning. This document provides PMO personnel with an understanding of the role of HARDMAN in meeting DOD requirements for MPT analysis. It outlines the PMO's responsibility for MPT requirements determination and briefly describes the HARDMAN procedures.

b. HARDMAN Methodology: Equipment/System/Subsystem (E/S/S). This document provides the PMO MPT analyst the step-by-step procedures for determining the MPT requirements for any Navy E/S/S.

c. HARDMAN Methodology: Aviation. This document describes the procedures for applying the HARDMAN methodology to determine MPT requirements for aviation E/S/S and the associated requirements for a total aviation squadron.

d. HARDMAN Methodology: Total Ship. This document describes the procedures for applying the HARDMAN methodology to determine MPT requirements for a total ship acquisition.

e. MPT Data Sources Directory: Analyst Guide. This document provides MPT analysts a reference to types, locations and procedures to access Navy data sources of MPT information for use in MPT requirements determination for new acquisitions.

3. The HARDMAN publications may be obtained from COMNAVAIRSYSCOM, COMNAVSEASYSYSCOM and COMSPAWARSYSCOM manpower and training offices and from CNO (OP-111).

Functions and Membership of the MPT Advisory Board

1. Background. To conduct an early and detailed MPT analysis of new acquisitions and review the MPT requirements determined by the analysis, Subject Matter Experts (SMEs) throughout the MPT and WSAP communities must be identified and solicited to provide specific MPT data during the analysis and to review the results. These experts comprise the MPT Advisory Board for each acquisition and will assist the Program Management Office (PMO) in the identification and review of acquisition MPT requirements.

2. Policy. The purpose of the Board is to assist and advise the PMO in the identification and review of MPT requirements. The PMO will identify the SMEs necessary to support the MPT analysis of the new acquisition and will formally establish the MPT Advisory Board in writing. Participating organizations shall designate members to the MPT Advisory Board who are knowledgeable of their organization's involvement in WSAP program support and authorized to speak for their organization concerning WSAP MPT issues. The Board will be co-chaired by CNET, or the appropriate Training Agent (TA), and the program Resource Sponsor. The MPT Advisory Board does not have to meet formally at a conference to carry out its functions.

3. Membership. Membership of the MPT Advisory Board shall include, but not be limited to, representatives from the following:

- a. Program Management Office (ILS manager)
- b. DCNO(MPT) (OPs-111, 122, 123, 130, 132, 135)
- c. Program Sponsor
- d. Resource Sponsor
- e. Naval System Commands (SYSCOM MPT Branch)
- f. Chief of Naval Education and Training (CNET)
- g. Commander Naval Military Personnel Command (COMNAVMILPERSCOM)
- h. Fleet Commanders in Chief (FLTCINCs)
- i. Type Commanders (TYCOMs)
- j. NAVEDTRACOM Functional Commands (CNATRA, CNTECHTRA, COMTRALANT and COMTRAPAC).

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Policy Governing the Identification of MPT Requirements
for Navy Acquisitions

1. Policy Basis. During recent years, acquisition policy at DoD and Navy levels has enhanced the role of MPT planning as a part of the WSAP. This enhancement is demonstrated in the most recent revisions to DoD directives, instructions and military standards, particularly MILSTD 1388-1A (Logistics Support Analysis). The HARDMAN program provides an integrated approach to MPT analysis and planning consistent with the requirements of DoD directives, Navy instructions, military standards and logistics support analysis (LSA). It supports the NTP process and manpower and training planning and programming. Implementation of the HARDMAN program makes available the necessary tools, techniques and methodology for identification of MPT concepts and resource requirements for any program in the WSAP beginning with program initiation and continuing through fleet introduction. These standardized methods are available for use by the Navy and will be used to facilitate early MPT analysis of all new acquisitions.

Use of the HARDMAN program allows the Program Management Office (PMO) to meet its responsibility for MPT planning and ensures that when program reviews occur at the Navy and DoD levels, approval will not be delayed because of inadequate MPT planning. The environment in which the Navy must build and man its equipment will, in the future, be a more challenging setting than in the past. The availability of skilled manpower and the competition from other employment sectors will make manpower and training resources more critical factors in successful new weapon systems deployment. The PMO's responsibilities will be complicated by these circumstances. More questions related to MPT requirements will be asked and better answers will be required. The HARDMAN program is the Navy's effort to place in the hands of its weapon systems' builders the tools and techniques that will enable them to answer critical MPT questions.

2. MPT Requirements Determination Timeframe. References (b) and (c) establish policy and responsibility for Integrated Logistic Support (ILS), including manpower and training planning, as an inherent part of the acquisition process. The directives also specify the manpower-related activities that must be accomplished for each milestone in the acquisition. These requirements are listed below and will be complied with using the HARDMAN methodology.

a. Prior to Program Initiation (POM Approval) and Concept Exploration. MPT resource constraints must be identified in

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the Justification for Major System New Start (JMSNS). If appropriate, these constraints should be based on an analysis of systems presently in the mission area.

b. Prior to Milestone I and Demonstration and Validation. MPT implications of alternative operational and support concepts must be evaluated; the requirements must be identified and determined to be consistent with updated program constraints. MPT cost drivers of systems must be identified and potential improvements established. MPT parameters critical to system readiness must also be identified.

c. Prior to Milestone II and Full-Scale Development. A consistent set of MPT goals and thresholds must be established and compared to a baseline system. The sensitivity of MPT resource requirements to changes in key parameters and the associated impacts on readiness must be analyzed. MPT requirements by work center must be identified based on design, support and readiness trade-off analyses. Requirements for unique skills or specialties which are in short supply must be identified.

d. Prior to Milestone III and Production and Deployment. MPT requirements must be affirmed as meeting goals for peacetime readiness and wartime employment. A preliminary manpower document and support analysis, including comparison by work center to a baseline system, must be available and manpower requirements must be satisfied by projected personnel assets.

3. MPT Requirements Determination Policy. MPT requirements to support new acquisitions will be determined using the HARDMAN methodology within the timeframe specified in reference (b) as outlined in paragraph 2 above. Effective 1 October 1985, the MPT requirements for Navy acquisitions (FY-86 and beyond New Starts) will be determined using the HARDMAN methodology. HARDMAN will become the Navy process for determining MPT requirements which are documented in Navy Training Plans (NTPs), Preliminary Ship and Squadron Manpower Documents (PSMD/PSQMD), Integrated Logistic Support Plans (ILSPs) and numerous other WSAP and MPT-related documents. The principals charged with MPT identification and planning responsibilities for WSAP programs shall execute these responsibilities using the HARDMAN methodology.

4. Reporting Requirements. The benefits to be derived from the HARDMAN program can only be realized through proper dissemination of MPT requirements determination analysis results. The products produced by the HARDMAN methodology are the MPT Concept Document (MPTCD) and the MPT Resource Requirements Document

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(MPTRRD). These two documents are prepared and forwarded for review and comments by the MPT Advisory Board prior to Milestone I in the WSAP. The Pre-Milestone I MPTRRD will frequently be based on estimated installation schedules but it will assist in assessing the MPT impact of Milestone I decisions. The MPTRRD will be updated to reflect acquisition changes and updates and will be the program manager's statement of MPT requirements until the draft NTP is produced. The MPTCD and MPTRRD are described in detail in the HARDMAN methodology documents discussed in enclosure (1).